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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,297	08/17/2001	Jorge Tejada	99-565	4865

7590 01/30/2003

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EXAMINER

ARNOLD JR, JAMES

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 01/30/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.	Applicant(s)	
09/932,297	TEJADA ET AL.	
Examiner	Art Unit	
James Arnold, Jr.	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**  
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**  
Responsive to communication(s) filed on 17 August 2001.

- 1) ☒ Responsive to communication(s) filed on 17 August 2001.  
 2a) ☐ This action is **FINAL**.  
 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-10 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.  
 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.  
 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) ☐ The translation of the foreign language provisional application has been received.  
 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.  
 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.  
 5) ☐ Notice of Informal Patent Application (PTO-152)  
 6) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of claims 1-10 in Paper No. 5 is acknowledged.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monque (USPN 5,576,256) in view of Martinez (5,254,327).

The Monque reference discloses a support comprising a mixture of zeolite and alumina. See Column 6, lines 57-61. See Column 16, lines 66-67. The Monque reference discloses a metal active phase on said support comprising a first metal selected from group 6 of the periodic table of elements (including molybdenum); a second metal selected from the group consisting of group 8, 9, and 10 (including nickel and cobalt); and a third element selected from group 15 (including phosphorus). See abstract. See Column 2, lines 1-7. See Column 14, lines 29-37.

Art Unit: 1764

See Column 15, lines 64-67. See Column 16, lines 1-10 and lines 47-50. The Monque reference discloses the use of an MFI zeolite. See Column 15, lines 53-54.

The Monque reference does not disclose a zeolite having an Si/Al ratio of between about 1 and about 20. The Monque reference does not disclose an ST-5 zeolite. The reference does not disclose a catalyst wherein the support comprises between about 10 and about 90% wt of said zeolite and between about 90 and about 10% wt of said alumina. The reference does not disclose a catalyst wherein said metal active phase contains at least about 1% (wt) of said first metal, at least about 0.5% (wt) of said second metal, and at least about 0.2% (wt) of said third element.

The Martinez reference discloses a zeolite having an Si/Al ratio of less than 26. See Abstract. The Martinez reference discloses the use of an ST-5 zeolite. See Column 5, lines 16-18.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a zeolite having an Si/Al ratio of between about 1 and about 20 because the use of the zeolite as a component of the catalyst is disclosed by both Monque and Martinez and it would be appropriate to use a zeolite with an Si/Al ratio appropriate for catalytic activity. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize an ST-5 zeolite because ST-5 is one type of MFI zeolite and would be expected to have similar catalytic properties. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a catalyst wherein the support comprises between about 10 and about 90% wt of said zeolite and between about 90 and about 10% wt of said alumina because the Monque reference discloses a support with zeolitic and alumina composition and it would be appropriate to use a support with said composition

Art Unit: 1764

arranged in any ratio effective for catalytic activity. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a catalyst wherein said metal active phase contains at least about 1% (wt) of said first metal, at least about 0.5% (wt) of said second metal, and at least about 0.2% (wt) of said third element because the Monque reference discloses the use of a metal active phase and it would be appropriate to use the component metals in any ratio effective for catalytic activity.

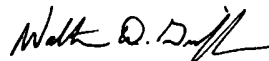
### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Arnold, Jr. whose telephone number is 703-305-5308. The examiner can normally be reached on Monday-Thursday 8:30 AM-6:00 PM; Fridays from 8:30 AM-5:00 PM with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

ja  
January 28, 2003

  
**Walter D. Griffin**  
**Primary Examiner**